

MR1197-610

Application Serial No. 10/791,778

Responsive to Office Action dated 27 October 2005

AMENDMENTS TO THE SPECIFICATION:

Please replace the original Specification, Pages 1-5, with the following amended Specification, a clean copy of which is attached to this Amendment:

FIELD OF THE INVENTION

The present invention relates to an umbrella having a ~~the~~ runner, which can be positioned ~~at the place~~ to maintain the umbrella in an open state ~~being opened~~ by a novel and improved structure.

BACKGROUND OF THE INVENTION

It is known that an umbrella includes a runner for controlling the umbrella frame to be opened or closed. In order to keep the umbrella at the opened ~~opening~~ state, a spring bow is mounted ~~applied~~ within the shaft for stopping the runner at the upper position ~~around the shaft~~. The manufacturing procedure for mounting the spring bow in the shaft is very difficult and the strength of the shaft will be decreased if a slot is formed ~~a slot~~ thereon. Moreover, the spring bow may clip the user's finger when ~~he is closing~~ the umbrella is closed.

SUMMARY OF THE INVENTION

The present invention provides ~~is to provide~~ an engaging structure for the runner of an umbrella, in which the runner can be engaged around the shaft without the ~~prior~~ spring bow of prior art. Hence, it can be manufactured with ~~in~~ ease and will be convenient utilized for people to use conveniently. ~~Now, accompanying with the following drawings,~~ The features and advantages ~~character~~ of the present invention will be described hereafter ~~here and after~~ and may be more fully understood in light of the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view showing the engaging structure for a runner according to the present invention.

Figure 2 is an exploded perspective view of Figure 1.

Figure 3 is a plan view showing an umbrella with the runner in a closed state according to the present invention.

Figure 4 is a plan view of Figure 3 showing the umbrella being opened ~~opening~~.

Figure 5 is a plan view of Figure 4 showing the umbrella ~~being~~ completely opened.

Figure 6A is a plan view showing another embodiment of engaging structure according to the present invention.

Figure 6B is a cross-sectional view showing another embodiment with grooves in the shaft corresponding to the balls received in the apertures of the runner.

Figure 7 is a plan view showing a further embodiment of engaging structure according to the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

~~Referring to Figures~~ Figure 1 to 3 ~~[[,]]~~ show the present invention which provides ~~is to provide~~ an engaging structure for the runner of an umbrella, wherein the runner (1) has been provided with several side apertures (11), each for receiving a corresponding ~~relating~~ ball (12). A sleeve (2) is provided around the runner (1), which includes an upper opening (22) and an inner middle edge (21) having a smaller diameter than ~~relating~~ ~~to~~ the opening (22). The sleeve (2) has an inner low, projective ring (23), which can engage with a positioning ring (13) on the runner (1) thereunder. The runner (1) with the sleeve (2) is provided around a shaft (3) having an annular concave ~~convex~~ portion (31).

When opening ~~to open~~ the umbrella ~~while~~ the runner (1) is moved upward to the position of shown in Figure 4 ~~[[,]]~~ until it ~~the runner (1)~~ cannot be moved but the sleeve (2) can still be moved upward a little distance to force the projective ring (23) to slide

over sliding ~~cross~~ the positioning ring (13) and allowing the middle edge (21) of the
sleeve (2) to compress ~~compressing~~ the balls (12 ~~21~~) which have fallen ~~falling~~ into the
concave ~~convex~~ portion (31) of the shaft (3). This procedure ~~That~~ obtains a firm
engagement for the runner with the shaft and maintains the umbrella in at a stable opened
opening state without the need for ~~of~~ a ~~prior~~ spring bow mounted ~~received~~ in the shaft.

In order to obtain a similar engaging function ~~purpose~~, the shaft (3) of the
invention can be modified to provide it with several grooves (33) corresponding ~~relating~~
to the balls (12) as shown in Figure 6B 6. Alternatively, ~~Or~~ two tubes (32) are provided
on the shaft (3) separated at a distance thereby forming an ~~with a~~ annular concave ~~convex~~
portion between them for receiving the balls (12) in order to engage ~~engaging~~ the runner
(1 2) to maintain ~~for~~ the umbrella in at an open opening state stably.